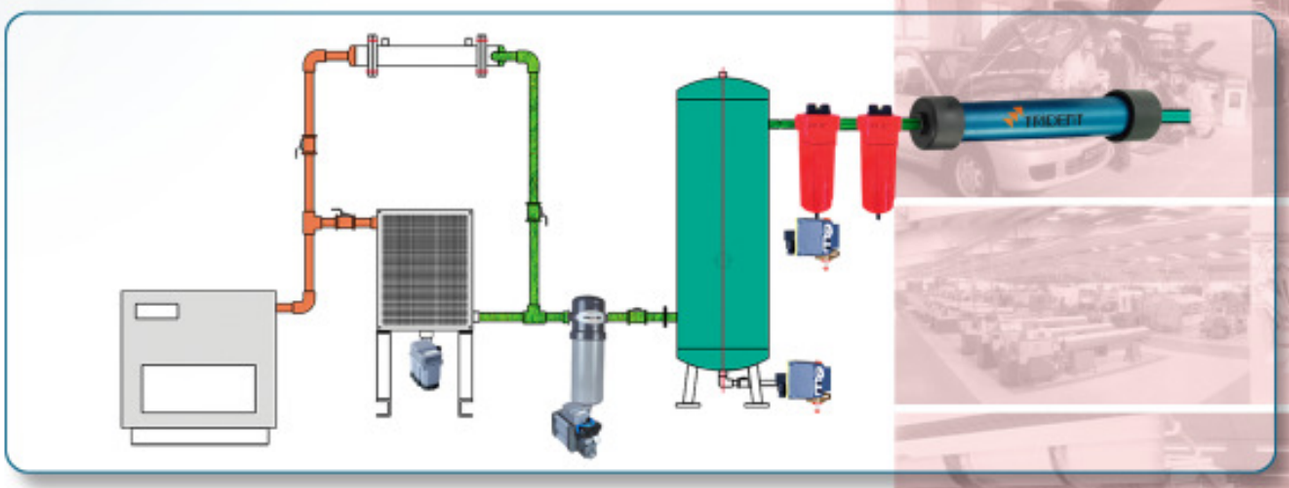
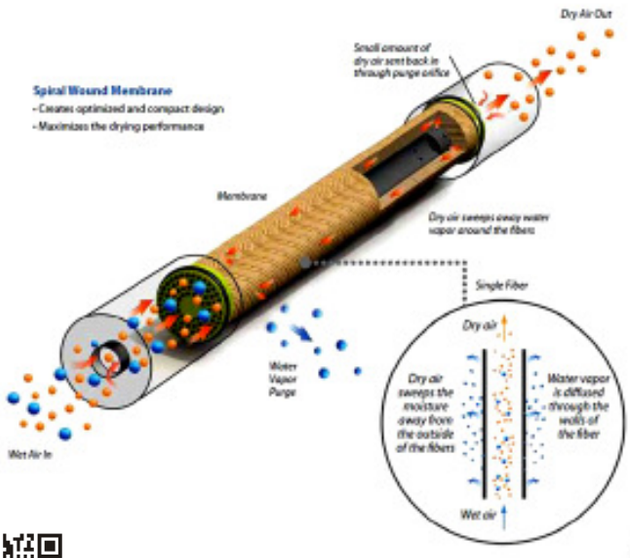
TRIDENT
engineering quality air & gas

Lasting Values





Membrane Dryer

- Less space - Compact inline design.
- No Electricity requirement.
- No moving parts - Maintenance free.
- Can be used in Hazardous area - Explosion proof.
- Performs better irrespective of external environments.
- No consumable (Refrigerants or Desiccants).

India's Largest Exporter of Compressed Air Treatment Products

Working Principle :

The Humid compressed air consisits of N2, O2-Water vapours and traces of other gases passed through a bundle of hollow fibres. The hollow fibres are composed of a membrane specifically designed to attract and adsorb the water vapour. Inorder to desorb the water vapour the partial flow of dried air expanded to atmospheric pressure and passed through outside of the hollw fibre bundle in a counter flow direction, which will flush out the moisture.

Inorder to ensure better membrane life, the dryer will be supplied with two stage filteration viz particulate and a coalescer.

Trident Innovative technology membrane compressed air dryers are very compact in construction (Less space), Corrosion free, Noice less, no electricity requirement, and No moving parts hence mainatance free. Can be easily installed and can used in various applications.

Specification of Dryers

Dew Point (PDP) deg C	15	3	-20	-40	Recommended Filters	
Dewpoint Atmospheric Deg C	-15	-26	-40	-70	Particulate filter	Coalesing filter
Purge Loss	10%	14%	21%	29%		
	cfm					
TMD-3	3.5	2.5	1.7	1.2	G-24 X IA	G-24 Y IA
TMD-5	5	3.5	2.5	1.8		
TMD-10	10.5	7.5	5	3.5		
TMD-20	21	15	10	7	G-100 X IA	G-100 Y IA
TMD-30	28	20	13	10		
TMD-45	48	34	22	16		
TMD-60	60	42	28	20		
TMD-100	100	75	50	36	G-250 X IA	G-250 Y IA

Specification :

Operating temperature	2 to 60°C
Operating pressure	7 bar (g)
Max operating pressure	12 bar (g)
Particulate filter	1 µm
Coalescing filter	0.01 µm

Applications

• Medical Air • Analytical Equipments • Pressuring Electrical Cabinets • Pneumatics • Painting • Industrial Point-of-use Application • Ozone generation

Performance correction factors for different pressures

4	5	6	7	8	9	10	11	12
0.41	0.56	0.76	1	1.22	1.48	1.76	1.86	2.22

How to order

Inlet flow20 Cfm

Working pressure 5kg/cm²

Refering table Factor Pi = 0.56

Dryer capacity Required Flow / Pi = 20 / 0.56

Capacity required = 35 cfm

Select the model considering 35 cfm flow, also refer the dewpoint requirement from the specification chart.

Manufacturing Facility

Our Presence

Trident Pneumatics Pvt Ltd

5/232, K.N.G. Pudur Road, Coimbatore - 641 108, India. Ph : +91-422-2400492, 2401373 Fax : +91-422-2401376

e-mail : sales@tridentpneumatics.com Website : www.tridentpneumatics.com

Sales & Service Outlets	Ahmedabad 98673 67726	Bangalore 98450 93322	Chennai 97894 80564	Delhi 93113 10726	Hyderabad & Kolkatta 98854 45321	Mumbai & Pune 98673 67726

Our other Range of Products

• Time based Auto Drain Valve • Level Sensing Auto Drain Valve • Refrigeration Dryer • Blower Reactivated Dryer • Submicron Filter • Oil Water Separator